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### **‘Most Dangerous Building in America’ off the Critical list**

Golden, Colo., May 29, 2003 – The possibility of an accidental nuclear chain reaction in Building 771 at the Rocky Flats Site is no longer considered a “credible” scenario.

The “criticality incredible” determination was made this month after site cleanup workers successfully packaged and removed the last of several highly contaminated filters from Building 771, once described as the “most dangerous building in America” because of the hazardous and radioactive materials it once housed.

“This achievement marks another significant milestone in the site’s efforts to clean up and demolish major buildings that were highly contaminated as part of their former national defense mission,” said Department of Energy Rocky Flats Manager Gene Schmitt. “The risks from this site to workers and the general public continue to go down every day as cleanup work proceeds.”

A criticality accident is an inadvertent nuclear chain reaction, which gives off intense heat and radiation and can be fatal to anyone in close proximity. A Criticality Accident Alarm System is required in any facility that stores more than 450 grams of fissionable material with a greater than one-in-a-million probability of a criticality event in a year. Department of Energy Orders also require comprehensive criticality safety programs that impose strict controls on how work in nuclear buildings is performed and how nuclear materials and waste are packaged and stored. Throughout Rocky Flats’ operating history, there has never been an accidental criticality event.

A criticality safety evaluation determined earlier this month that a criticality event in Building 771 is no longer credible, which means that the levels of plutonium in the facility are below the amount physically necessary for a criticality event to occur. The criticality incredible designation is a significant milestone leading to eventual demolition of the building.

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“In the nuclear industry, risks related to fissionable material are taken quite seriously,” said Building 771 Kaiser-Hill Project Manager Tom Dieter. “Eliminating the remaining plutonium risk associated with this building has reduced the hazards to our workers and the surrounding community.” Dieter had particular praise for the Steelworker crews who safely completed the difficult work to remove material and reduce the risks.

National news media called Building 771 "the most dangerous building in America" in 1994 because of the danger posed by 15,000 liters of plutonium and nitric acid solutions in process piping, tanks and 4-liter bottles stored in gloveboxes. The more than 50 kilograms of plutonium hold-up that remained in the building's ducts, filter plenums and other process equipment were also a significant hazard to the cleanup crews.

To become criticality incredible, Building 771 workers drained thousands of liters of plutonium solutions, removed and packaged 240 contaminated gloveboxes, 397 tanks, and many miles of process piping. “The state of Building 771 was the most dangerous on site, perhaps anywhere in the country, from a criticality perspective,” said Howard Gilpin, Building 771 Kaiser-Hill safety manager, “because nowhere else was such a substantial amount of plutonium present in liquid form.”

Workers continue to perform cleanup and demolition work in Building 771 with demolition expected in calendar year 2004, keeping the site on schedule for completing all cleanup work in 2006. Two other Rocky Flats buildings also have been declared “criticality incredible,” including former manufacturing facility Building 776/777 and analytical laboratory Building 559.

Workers continue cleanup work in two other former manufacturing buildings – Buildings 707 and 371 – in anticipation of declaring those facilities criticality incredible later this year or in 2004.

Rocky Flats is a DOE-owned cleanup and closure site operated by Kaiser-Hill Company under an accelerated closure contract. The Rocky Flats mission includes special nuclear material management and shipment, nuclear deactivation and decommissioning, waste management and shipment, environmental cleanup and site closure.

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